

# Air Quality Study in Baldoyle

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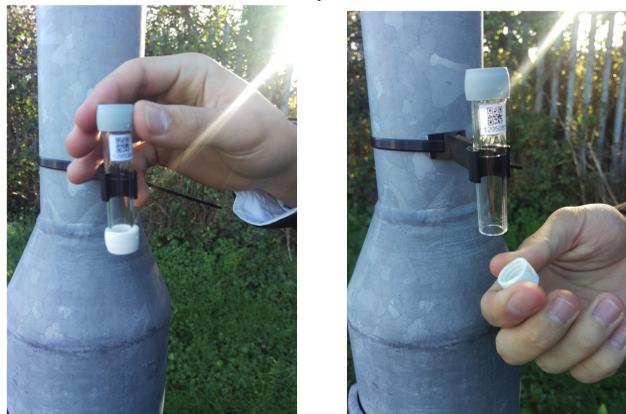
**Pobalscoil Neasáin** | Meas, Díograis & Dea-Chroí

### Introduction

We were interested in finding out the air quality in our locality. Nitrous oxide gas can cause acid rain but also can harm human health if found in large concentrations. Our school is in East Dublin in Baldoyle. The Irish sea is ~1km away. There is a large amount of traffic in our area and also a DART line run behind the school. We were expecting to see relatively high amounts of nitrous oxides because of the cars and buses.

### Research Methods

1. Find appropriate points to locate air samplers
2. Note the points and numbers on the gas samplers
3. Remove the base cap and clip the gas sampler into position recording the date and time.
4. Wait 28 days.
5. Replace the cap and note the date and time.
6. Seal in an envelope and return to the air analysis centre.
7. Await results and analyse

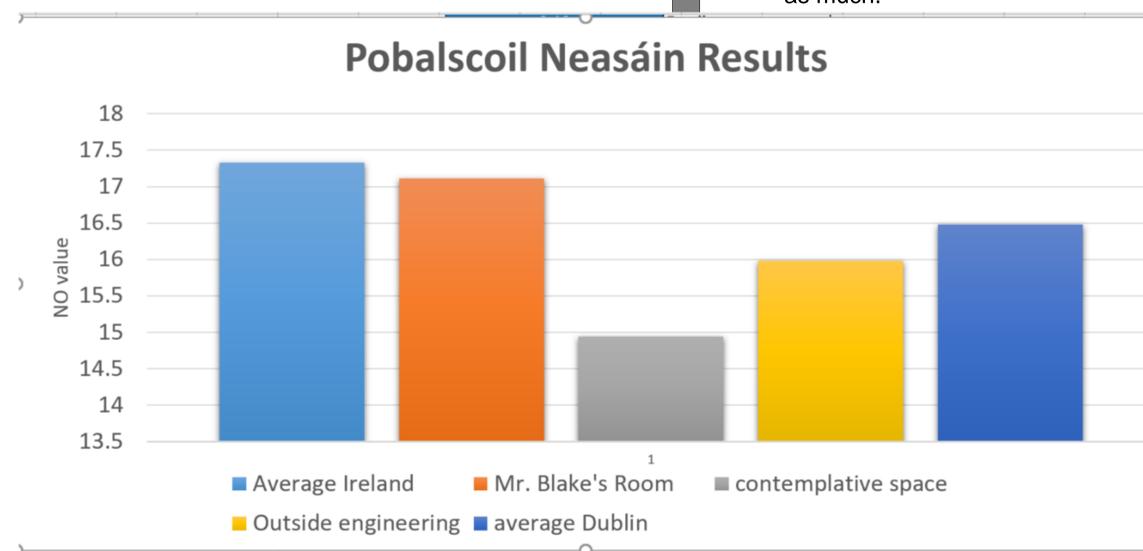


*School and sample locations*



### Results

Range of values: Lowest = 3.94 (Mayo: Large town)  
Highest = 43.61 (Offaly (beside traffic)\*)



### Discussion

The dart line beside our school brings in a lot of polluted air, however because we are on the coast the seafront winds brings in a lot of fresh unpolluted air. It is interesting to see the different values obtained within the school grounds. The garden area is within the building so maybe the trees have purified the air or the gases didn't accumulate there as much.

### Research Question(s)

Does the standing traffic outside our school have a serious implication for our health?

Does the DART line behind us cause any health issues?

Does the presence of trees in our school scrub the nasty gases out of the air?

### Conclusions

The results were as we expected due to the location of the school but as a whole its worrying to see the higher values obtained in other parts of the country.



### Bibliography